Teaching Sustainability through film-making

GrACE: Climate Education Webinars

28th November 2024

Prof Tom Dawson

Miss Anastasia Ellis



Why use films to teach?

- Stories are powerful
 - Shapes our morality
 - Influences our values
 - · We are what we 'consume'

Learning styles



Auditory

- These learners prefer to hear information and respond best to spoken instructions. They also like to repeat instructions out loud.



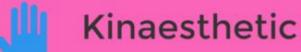
Visual

- These learners find seeing what they need to learn is the most beneficial; graphics, videos and action that they can watch.

Which one are you?







 These learners are very tactile, they need to get a feel for something. It is all about doing and sensing what they need to learn. This is at a physical level but can also connect an emotional level.



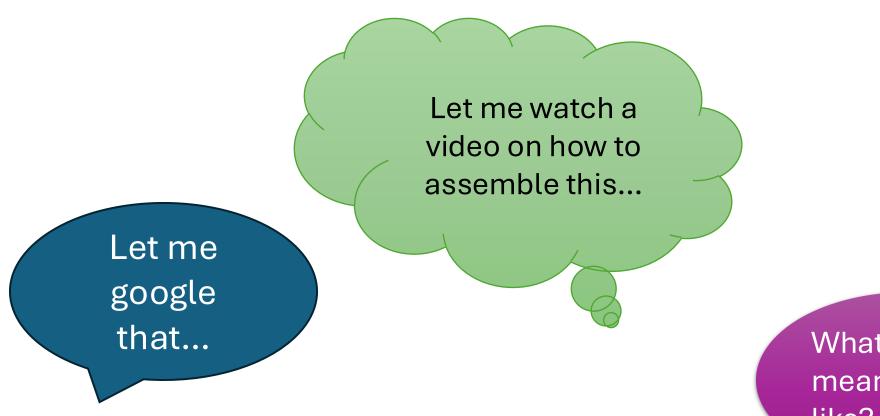
Learning styles

Most people learn . . .

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of what they read
of what they hear
of what they see
of what they see and hear
of what they talk over with others
of what they use and do in real life
of what they teach someone else
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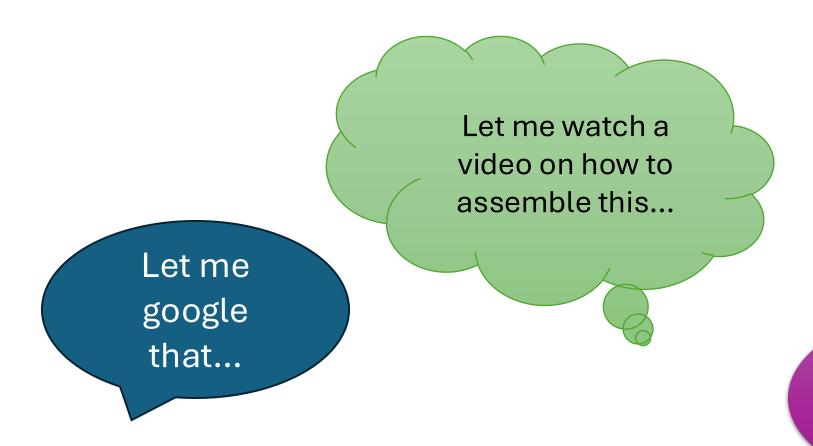
Source: Attributed to William Glasser; quoted by Association for Supervision & Curriculum Development Guide 1988

Don't know how to do something...?



What's it meant to look like?

Don't know how to do something...?

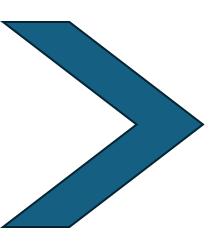


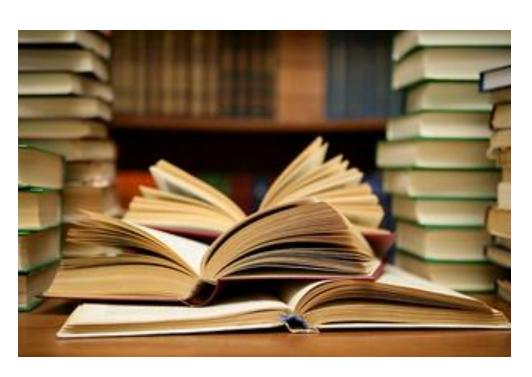
We show an increasing dependance, on the internet, to answer our questions...

What's it meant to look like?

Young people learn (increasingly) through online content







Why use films to teach climate change?

























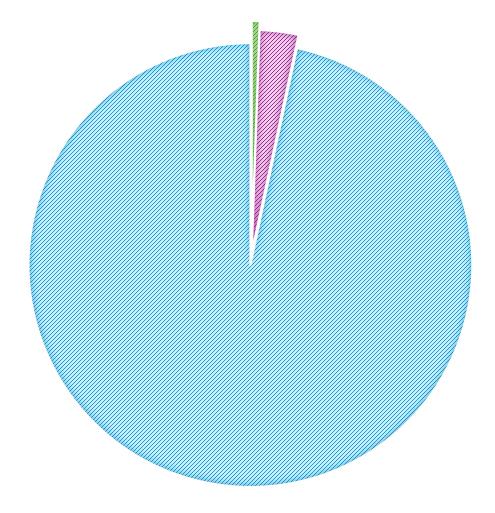


THE CHILL IS GONE.

"Climate silences"



"Climate silences"



- O.56% MENTION THE TERM "CLIMATE CHANGE"
- 2.8% MENTION ANY OF THE
 36 MAJOR CLIMATEADJACENT WORDS WE
 SEARCHED, INCLUDING
 "GLOBAL WARMING,"
 "CLIMATE CRISIS," "SEA
 LEVEL RISE," "SOLAR
 PANELS," AND "RENEWABLE
 ENERGY."
- 96.64% DO NOT MENTION ANY CLIMATE-ADJACENT WORDS

*according to new research we commissioned from the USC Annenberg Norman Lear Center's Media Impact Project. They analyzed all 37,453 scripts that aired in the US media market between 2016 and 2020.

✓ See what was trending in 2019 - Global ≎

Searches		News	News		People	
1	India vs South Africa	1	Copa America	1	Antonio Brown	
2	Cameron Boyce	2	Notre Dame	2	Neymar	
3	Copa America	3	ICC Cricket World	3	James Charles	
4	Bangladesh vs India		Cup	4	Jussie Smollett	
5	iPhone 11	4	Hurricane Dorian	5	Kevin Hart	
		5	Rugby World Cup	6	Billie Eilish	
				7	Greta Thunberg	
Acto	Actors		Athletes		R. Kelly	
1	Jussie Smollett			9	Joaquin Phoenix	
2	Kevin Hart	1	Antonio Brown		•	
3	Joaquin Phoenix	2	Neymar	10	Jordyn Woods	

Rryce Harner

What emotion do you feel when you hear the phrase climate change?

Emotions when discussing climate change

• Fear, Panic, Guilt, Apprehension, Eco-anxiety:

- 84% of children and young adults ages 16 to 25 are at least moderately worried about climate change
- 59% are very or extremely worried..."

1. Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey Hickman, Caroline et al.

The Lancet Planetary Health, Volume 5, Issue 12, e863 - e873

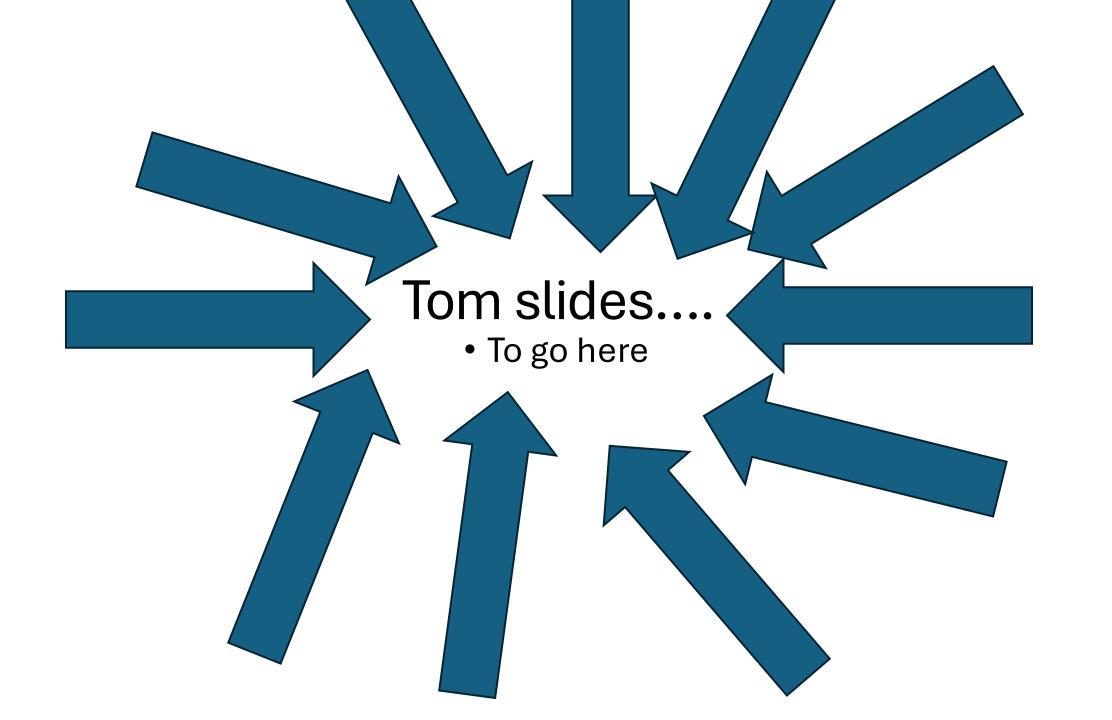


We need **BALANCE** and a more focused analysis of the future impacts of climate change

Especially in relation to specific topics...

Such as heritage sites!









INTERGOVERNMENTAL PANEL ON Climate change

Climate Change 2022

Impacts, Adaptation and Vulnerability

Summary for Policymakers











National Landmarks at Risk

How Rising Seas, Floods, and Wildfires Are Threatening the United States' Most Cherished Historic Sites







Temperature Change



31,000 yearold ivory scoop, Yana, Arctic Siberia © Vladimir Pitulko



Medieval textile, Andøy, Norway © Mari Karlstad



Bronze Age shoe © Vegard Vike Cultural History Museum, Oslo



Ivory owl effigy toggle, Nuvuk, Alaska © Anne M. Jensen



Kangeg Greenland midden © National Museum of Denmark



Hiorthhamn cableway station, Svalbard © Vibeke Vandrup Martens



The historic Ranch Foreman's Cabin, 2013, Valles Caldera National Preserve, New Mexico © Kristen Honig



Masonry rubble and wall of an ancestral Pueblo site, burned over during Las Conchas Fire, 2011, Bandelier National Monument, New Mexico © NPS / R. Schwab



Ceremonial obsidian spear point, Hopewell Culture National Historic Park © NPS



Vesiculated obsidian found after the Dome Fire, 1996 Santa Fe National Forest, New Mexico, © NPS / Anastasia Steffen





1 mile

Development of gullies after the Las Conchas Fire © NPS

1 km







2011 2013

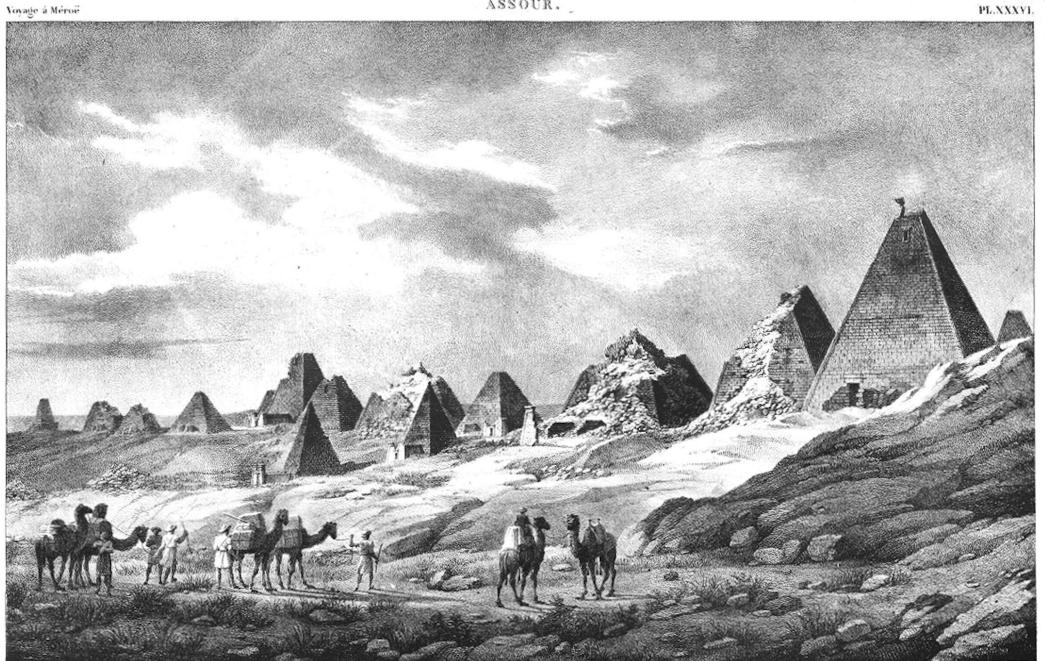
Development of gullies after the Las Conchas Fire © NPS



Abu Simbel, In: David Roberts Egypt & Nubia, 1845 - 1849



Chinguetti mosque, Mauritania © Francois Colin, Creative Commons Attribution-Share 2.5



In:

Frédéric

Cailliaud, Voyage à Méroé, au fleuve Blanc 1826

Nubian pyramids

at Meroe, Sudan.



© DAI, Archive Friedrich W. Hinkel

© QMPS, Cornelia Kleinitz

The same pyramid corner in 1985 and 2015 demonstrating the tremendous damage to the monuments due to sand abrasion

In: The Qatari Mission for the Pyramids of Sudan – Archaeological Investigation, Conservation and Site Management at Meroe 2015/2016. Alexandra Riedel, et al



Goderich,
Ontario ©
Huron
County
Museum &
Historic
Gaol



Goderich, Ontario after the tornado, 2011 © Jeremy Cohn



Statue of Liberty after Hurricane Sandy, 2012 © UCS/NPS/Daly





Precipitation Change



Flooding at Ayuttaya World Heritage Site, Thailand 2011 © Siamrath newspaper



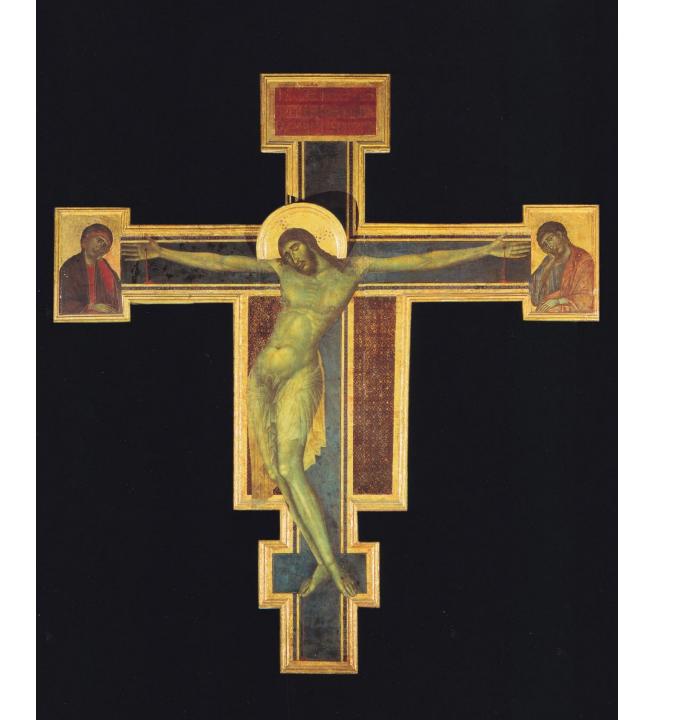
Panam Nagar, Sonargaon, Bangledesh © Fahad Faisal CC by SA 4.0



Level of River Arno flood, Florence,1966 CC BY-SA 3.0



Washing manuscripts from the National Library © UNESCO / Dominique Roger



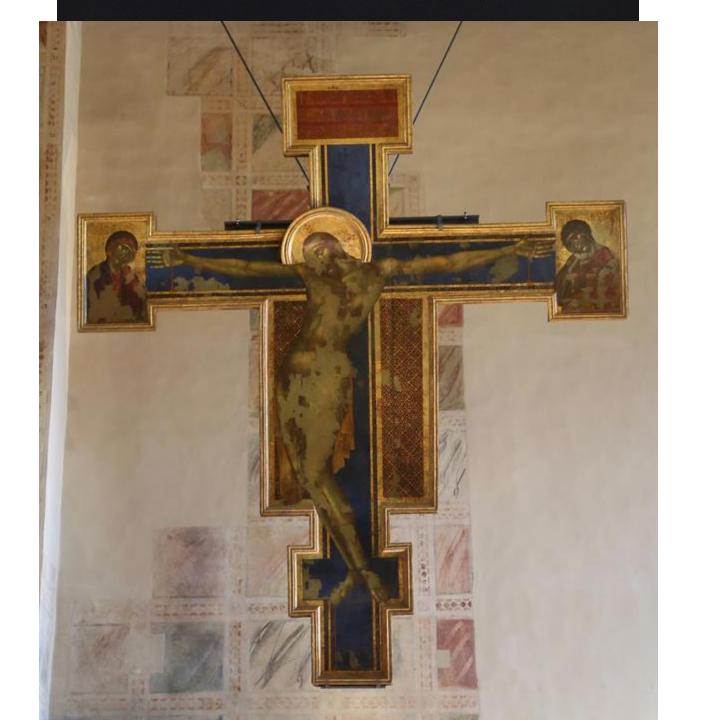
Cimabue, Crucifix, before 1288. Basilica di Santa Croce CC by SA



Cimabue's Crucifix after the 1966 flood of the Arno River © Ivo Bazzechi CC by SA



CC by SA



Cimabue, Crucifix, before 1288. Basilica di Santa Croce CC by SA





Sea Level Rise/Coastal Erosion



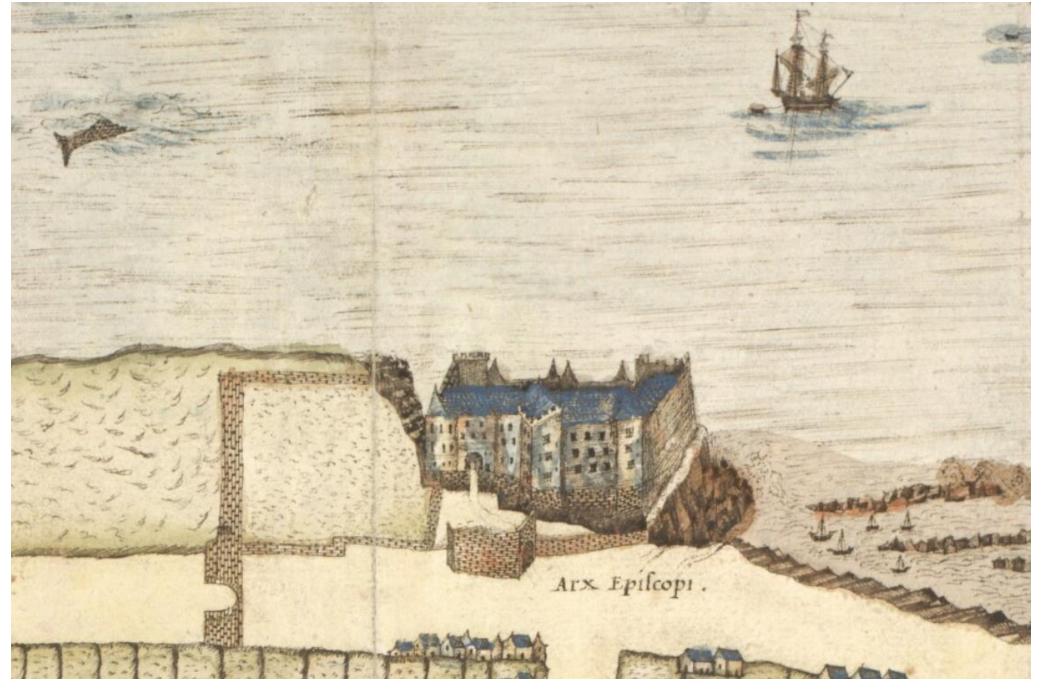
3,000 years of cultural deposits at Walakapa © Anne Jensen







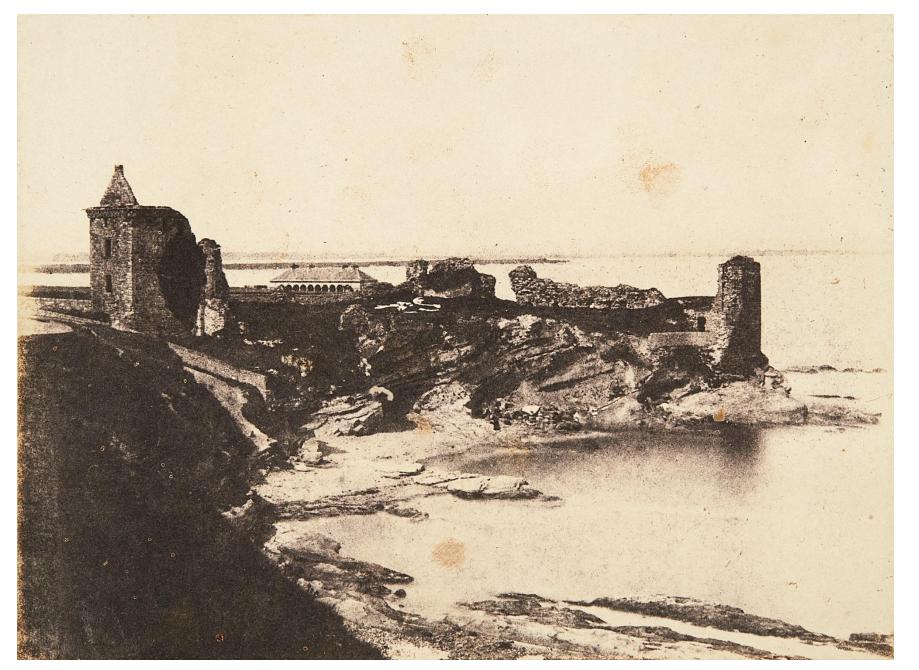




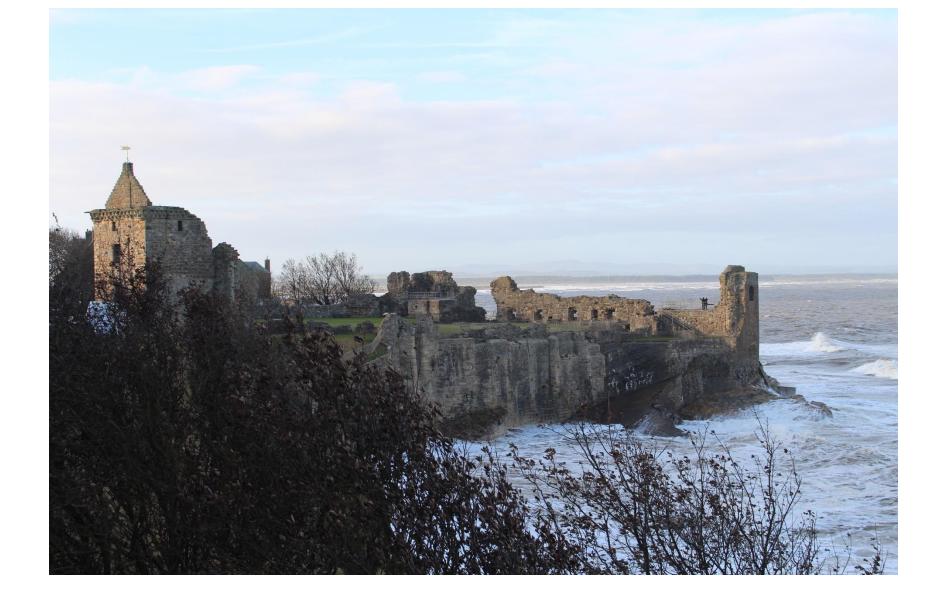
John Geddy c. 1580 © NLS



John Slezer *Theatrum Scotiae* 1693 © NLS



Hill & Adamson 1846 © University of St Andrews





Anonymous 1885 © University of St Andrews







The Importance of Walking



Anna Arghiros





Fishing for a Better Future

Film Pitch by Emily Souden



2050: The Gull Open/The Tidal Tee-off?







Tidal Patterns and Their Effects on Castle Sands

Isabella Karmis





Seals, Sea Walls, and Storm Surges

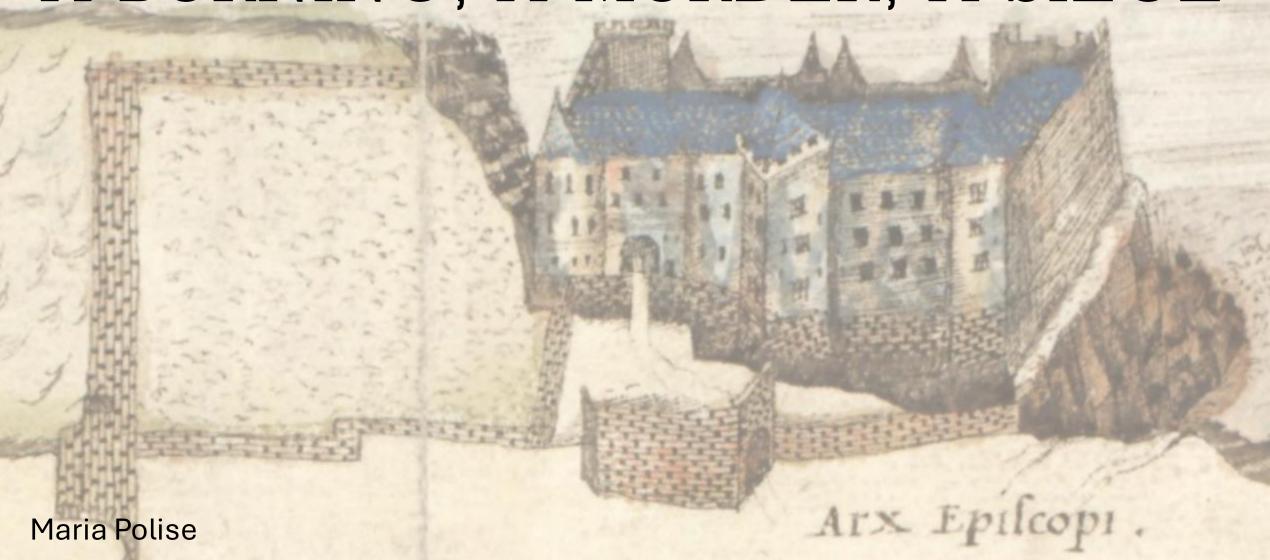
Joe Jennings



REDEFINING HERITAGE SITES IN THE 21ST CENTURY

The St Andrews Botanic Garden

A BURNING, A MURDER, A SIEGE



A Short Film Proposal produced by MAP productions on behalf of VIPs for

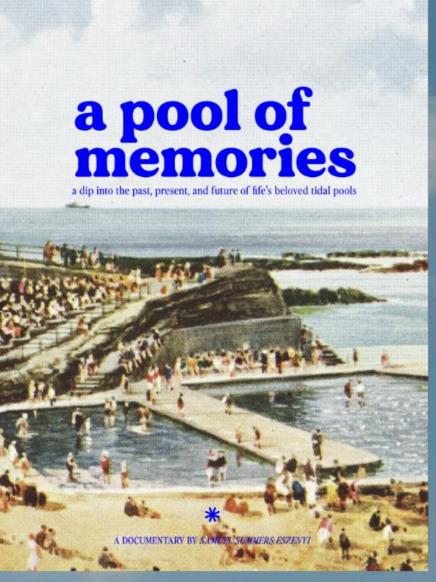
Change

A changing climate in St. Andrews

Waterpeople

A story of one of Scotland's coastal counties (Fife), its water people and their love of the sea in the face of climate change and environmental degradation.

Rachel Kimbell-Jack



Samuel Eszenyi

VIP pitch

Threats of Erosion Along Fife's Coastline









THE APPRENTICE

COMPETITION

ove island uk





Taz Madan

Synopsis:

Climate or Culture?- the

changing face of (green) spaces in

St Andrews

Green Spaces

How as climate change shifted our use of St Andrews/local green spaces?

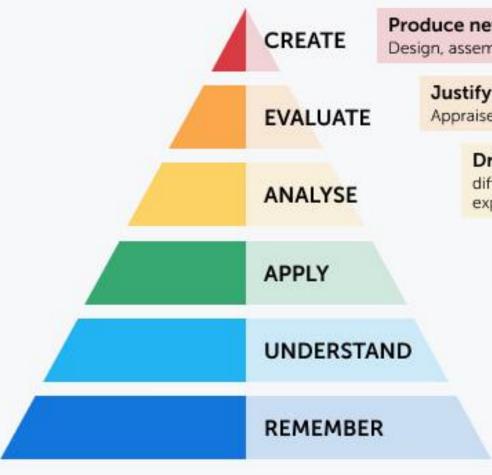
Pier, Botanic Gardens,

Third Spaces

Aree they in decline here in St Andrews? What to students and locals think about this?



Bloom's Taxonomy



Produce new or original work

Design, assemble, construct, conjecture, develop, formulate, author, investigate

Justify a stand or decision

Appraise, argue, defend, judge, select, support, value, critique, weigh

Draw connections among ideas

differentiate, organise, relate, compare, contrast, distinguish, examine, expertiment, question, test

Use information in new situation

Execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

Explain ideas or concepts

Classify, discribe, discuss, explain, identify, locate, recognize, report, select, translate

Recall facts and basic concepts

define duplicate, list, memorise, repeat, state

https://www.valamis.com/hub/blooms-taxonomy

 Teaching students how to successfully communicate complex research from a variety of disciplines

- Teaching students how to frame their films:
 - A call to action?
 - Drive social change?
 - Promote local heritage sites and the need for their preservation?
 - Offer opinions?
 - Focus on the facts?



Workshop

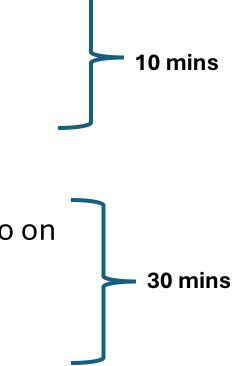
- You will be making a mini film (around 30 seconds) about climate change...
 - DON'T PANIC!

Resources to help:

- How to guide
- Tutors

Rough timings

- Agree upon a topic for your (30s) film and having a general discussion about what you wish to include in your video
- Plan the storyline of your video
- Write your script
- Nominate a LEAD EDITOR (they will be assembling the video on their machine)
- Find some suitable video clips and music
- Assemble it together!



Video ideas

- How can we change our lifestyle to help fight climate change?
- Debunking a climate change myths?
- What's the difference between climate change and global warming?
- What happens if we do nothing about climate change?
- What is a carbon footprint?
- How is climate change affecting our weather?
- How renewable energy can help fight climate change?
- How rising sea levels are putting heritage sites at risk?
- Vanishing landmarks: which heritage sites are at risk (and how can we stop it)?
- Or anything else!

Ever noticed how the weathers been getting crazier?

Welcome back!

- Thoughts on the filmmaking process?
- How did you find it?
- How could you use this in your teaching?





Some extra (+free!) **video** resources for teachers

- https://learningonscreen.ac.uk/ondemand
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- https://commons.wikimedia.org/wiki/Main_Page
- https://images.nasa.gov/
- https://www.archivesforeducation.com/films
- https://player.bfi.org.uk/free (archival films)
- https://obsproject.com/ (software for recording your screen and live streaming)

Some extra (+free!) **audio** resources for teachers

- https://filmmusic.io/
- https://www.storyblocks.com/audio
- https://www.audiomicro.com/
- https://www.audionetwork.com/